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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,913	07/03/2003	Alastair M. Reed	P0851	4658
23735	7590	09/09/2005	EXAMINER	
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008			DESIRE, GREGORY M	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,913

Applicant(s)

REED ET AL.

Examiner

Gregory M. Desire

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/17/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, see page 7 lines 12-19, filed 6/17/05, with respect to the rejection(s) of claim(s) 11-13 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Warnock (6,125,200).

2. This application contains claims 1-10 drawn to an invention nonelected without traverse in Paper filed 4/4/05. A response must include cancellation of nonelected claims.

Response to Arguments

3. Applicant argues (remarks page 8 lines 13-14) the Takada is concerned with how to best display flaws in materials, and does not seem concerned with the colors of the materials. The examiner disagrees because the examiner believes Takada is concerned with color (note col. 1 lines 38-39). The magnitude of the signal is obtained a black line is displayed. The existence or non-existence of black lines shows a concern with color.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao et al (6,788,801) in view of Warnock (6,125,200).

Regarding claim 11 Liao discloses,

Determining a color characteristic for a group of image samples (note col. 3 lines 47-49 and 50, input image including pixels (group of image samples), the input image being a color image has color characteristics that are determined);

Transforming from the group of image samples at least one determined color channel that should receive encoding into a transform domain (note col. 3 lines 51-53 and 55-56, original image which includes pixels group of image samples receive into wavelet transform the transform domain); and

Altering transform domain coefficient of the at least one determined color channel to encode the digital watermark (note fig. 2a, block 215 in connection with col. 3 lines 59-61, wavelet modulator modifies transform domain coefficient).

However, Liao does not disclose determining which plurality of color channels should receive encoding. Warnock discloses selecting color channel from grey scale space (note col. 3 lines 8-10). Liao and Warnock are combinable because they are from the

same field of endeavor color space conversion. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to select a color channel for encoding in the system of Liao as evidenced by Warnock. The suggestion/motivation for doing so would have been identifying text from color space (note col. 2 lines 62-63) for better reproduction of documents (note col. 2 lines 9-10). Therefore, it would have been obvious to combine Liao with Warnock to obtain the invention as specified in claim 11.

Regarding method claim 12 Liao and Warnock discloses,

Transforming the altered color channel into a spatial domain (note Liao fig. 2a block 220, inverse wavelet transform performs, transforming altered color channel into a spatial domain).

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liao and Warnock in view of Wang (6,252,971).

Liao and Warnock do not clearly disclose identifying which of the color channels will best hide watermark. Liao and Warnock disclose identifying which of the color channels will best hide watermark (note col. 4 lines 58-60, yellow best hide digital watermarks). Liao, Warnock and Wang are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include channel hides digital watermark in the system of Liao and Warnock as evidence by Wang. The suggestion/motivation for

doing so would have been producing more freedom in screen design. Therefore, it would have been obvious to combine Liao, Warnock with Wang to obtain the invention as specified in claim 13.

7. Claims 14-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Sun et al (5,818,032) in view of Takada et al (6,77,931).

Regarding method claim 14 Sun discloses,

Providing a set of encoding values for an image sample (note fig 1., binary data examiner interprets as encoding values of the rendered image (image sample)).

Determining a color characteristic (fig. 1 categorizes yellow) for the image sample (rendered image) based on its color value (provides pixel value examiner interprets as color value)

However, Sun does not disclose selectively scaling in the image sample based on the color characteristic. Takada discloses from selected color changing (scaling) the color based on depth of color (color characteristic) (note col. 2 lines 32-40). Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include selective scaling image sample based on color characteristic.

Improved visibility would have been highly desirable feature in the color masking art due to luminance functions and Takada recognizes that improved visibility would be expected when selectively scaling image samples based on the color characteristic of Takada is included in Sun.

Regarding method claim 15 Sun and Takada discloses,

Wherein scaling effects a change in luminance (note Sun, fig. 2)

Regarding method claim 16 Sun and Takada discloses,

Wherein the scaling comprises a scale to black (note Takada fig. 5, yellow goes to black).

Regarding method claim 17 Sun and Takada discloses,

Wherein the scaling comprises a scale to white (note Takada fig. 5, yellow goes to black to white).

Regarding method claim 18 Sun and Takada discloses,

Wherein the color characteristic comprises yellow content (note Sun fig. 1, 16, yellow value).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory M. Desire whose telephone number is (571) 272-7449. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory M. Desire
Examiner
Art Unit 2625

A handwritten signature in black ink, appearing to read "Gregory M. Desire", written over a horizontal line.

G.D.
September 2, 2005